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**(54) Title:** The Biopolymer Extraction Process

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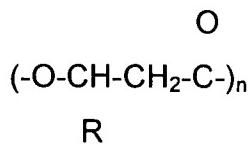
**(57) Summary:** Patent for "THE BIOPOLYMER EXTRACTION PROCESS" the cells containing biopolymer are subjected to a single adequate solvent and polymer insolubility in the solvent is achieved without an insoluble agent.

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## Descriptive Report of the "BIOPOLYMERS EXTRACTION PROCESS" Invention

### INTRODUCTION

There are various types of soil bacteria that accrue reserve materials under unbalanced growth conditions. In some specific types, the materials are the polyhydroxyalcanoates (PHA), which are aliphatic polyesters, are insoluble in water, and repeat the following structure:



Where,

R, belongs to the n-alkyl group and contains a variable length

(R= methyl, hydroxybutirate (HB))

(R= ethyl, hydroxyvalerate (HV))

(R= propyl, hydroxycapranoate (HC))

(R= butyl, hydroxyheptanoate (HP))

(R= pentyl, hydroxyoctanate (HO))

The PHA microbial polymer can reach between 10% to 90% of the bacteria's dry weight. This is a thermoplastic polymer that contains characteristics analogous to those found in conventional plastic resins. In addition, this polymer is biodegradable.

The cells that contain a high degree of the biopolymer